United Nations

Report of the Committee on the Peaceful Uses of Outer Space

General Assembly
Official Records
Fifty-fourth Session
Supplement No. 20 (A/54/20)

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United Nations • New York, 1999

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ISSN 0255-1144

[Original: English]
[2 September 1999]

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Chapter I
Introduction

1. The Committee on the Peaceful Uses of Outer Space held its forty-second session at the United Nations Office at Vienna from 14 to 16 July 1999. The officers of the Committee were as follows:

Chairman:
U. R. Rao (India)

Vice-Chairman:
Raimundo González (Chile)

Second Vice-Chairman/Rapporteur:
Mohamed Aït Belaïd (Morocco)

The unedited verbatim transcripts of the meetings of the Committee are contained in documents COPUOS/T.456-461.

A. Meetings of subsidiary bodies

2. The Scientific and Technical Subcommittee of the Committee on the Peaceful Uses of Outer Space had held its thirty-sixth session at the United Nations Office at Vienna from 22 to 26 February 1999 under the chairmanship of Dietrich Rex (Germany). The report of the Subcommittee was issued as document A/AC.105/719.

3. The Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space had held its thirty-eighth session at the United Nations Office at Vienna from 1 to 5 March 1999 under the chairmanship of Vladimír Kopal (Czech Republic). The report of the Subcommittee was issued as document A/AC.105/721. The unedited verbatim transcripts of the meetings of the Subcommittee are contained in documents COPUOS/Legal/T.613-621.

B. Adoption of the agenda

4. At its opening meeting, the Committee adopted the following agenda:

1. Adoption of the agenda.
2. Election of officers.
3. Statement by the Chairman.
4. General exchange of views.
5. Preparations for the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III) by the Preparatory Committee for UNISPACE III.
6. Report of the Scientific and Technical Subcommittee on the work of its thirty-sixth session.
7. Report of the Legal Subcommittee on the work of its thirty-eighth session.
8. Other matters.
9. Report of the Committee to the General Assembly.

C. Membership and attendance

5. In accordance with General Assembly resolutions 1472 A (XIV) of 12 December 1959, 1721 E (XVI) of 20 December 1961, 3182 (XXVIII) of 18 December 1973, 32/196 B of 20 December 1977, 35/16 of 3 November 1980 and 49/33 of 9 December 1994 and decision 45/315 of 11 December 1990, the Committee on the Peaceful Uses of Outer Space was composed of the following Member States: Albania, Argentina, Australia, Austria, Belgium, Benin, Brazil, Bulgaria, Burkina Faso, Cameroon, Canada, Chad, Chile, China, Colombia, Cuba,[1] Czech Republic, Ecuador, Egypt, France, Germany, Greece, Hungary, India, Indonesia, Iran (Islamic Republic of), Iraq, Italy, Japan, Kazakhstan, Kenya, Lebanon, Mexico, Mongolia, Morocco, Netherlands, Nicaragua, Niger, Nigeria, Pakistan, Philippines, Poland, Portugal, Republic of Korea,[1] Romania, Russian Federation, Senegal, Sierra Leone, South Africa, Spain, Sudan, Sweden, Syrian Arab Republic, Turkey, Ukraine, United Kingdom of Great Britain and Northern Ireland, United States of America, Uruguay, Venezuela, Viet Nam and Yugoslavia.

6. At its 456th and 458th to 460th meetings, the Committee decided to invite, at their request, the representatives of Algeria, Azerbaijan, Belarus, Bolivia, Costa Rica, Finland, Guatemala, the Holy See, Luxembourg, Malaysia, Namibia, Peru, Saudi Arabia, Slovakia, Sri Lanka, Thailand, Tunisia and the United Arab Emirates to attend its forty-second session and to address it, as appropriate, on the understanding that it would be without prejudice to further requests of that nature and that it would not involve any decision of the Committee concerning status.

7. Representatives of the United Nations Educational, Scientific and Cultural Organization (UNESCO), the World Meteorological Organization (WMO) and the International Atomic Energy Agency (IAEA) also attended the session.

8. Representatives of the European Space Agency (ESA), the International Mobile Satellite Organization (IMSO), the International Organization of Space Communications (INTERSPUTNIK), the Committee on Space Research (COSPAR), the International Academy of Astronautics (IAA), the International Astronautical Federation (IAF), the International Astronomical Union (IAU) and the International Society for Photogrammetry and Remote Sensing (ISPRS) also attended the session.

9. A list of delegations and representatives attending the session is contained in document A/AC.105/1999/XLII/INF/1. The States members of the Committee attending the session were: Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Canada, Chile, China, Colombia, Cuba, Czech Republic, Ecuador, Egypt, France, Germany, Greece, Hungary, India, Indonesia, Iran (Islamic Republic of), Iraq, Italy, Japan, Kazakhstan, Kenya, Lebanon, Mexico, Morocco, Netherlands, Nigeria, Pakistan, Philippines, Poland, Portugal, Republic of Korea, Romania, Russian Federation, Senegal, South Africa, Spain, Sudan, Sweden, Turkey, Ukraine, United Kingdom of Great Britain and Northern Ireland, United States of America, Venezuela and Viet Nam.

D. Proceedings

Bureau of the Committee

10. At its forty-first session, in 1998, the Committee on the Peaceful Uses of Outer Space had been informed that Mouslim Kabbaj (Morocco) would be unable to complete his term of office as Second Vice-Chairman/Rapporteur of the Committee. The Committee had recalled the agreement that it had reached in 1997 on the working methods of the Committee and its subsidiary bodies,[2] which provided that when any officer could not complete a term, the regional group holding the office concerned should nominate a candidate to be elected at the beginning of the session that immediately followed the termination of that officer's tenure.

11. The Committee noted that its members had been informed in a note verbale dated 22 October 1998 that the Group of African States had nominated Mohamed Aït Belaïd (Morocco) as its candidate for the office of Second Vice-Chairman/Rapporteur of the Committee. In addition, the nomination had been brought to the attention of the Scientific and Technical Subcommittee at its thirty-sixth session, in 1999 (A/AC.105/719, para. 91).

12. At its 456th meeting, the Committee elected Mohamed Aït Belaïd (Morocco) as Second Vice-Chairman/Rapporteur of the Committee for the remainder of the term of that office.

13. At its thirty-eighth session, in 1999, the Legal Subcommittee had been informed that Václav Mikulka (Czech Republic) would be unable to complete his term of office as Chairman of the Legal Subcommittee. The Committee recalled that, in accordance with the agreement that it had reached in 1997,[3] any election taking place in a Subcommittee to replace an officer who was not able to complete a term should be approved retroactively by the Committee at its session held in the same year. The Committee noted that, in accordance with agreed procedure, the Legal Subcommittee, at its thirty-eighth session, had elected Vladimír Kopal (Czech Republic) as Chairman of the Legal Subcommittee for the remainder of the term of that office (A/AC.105/721, para. 2).

14. At its 456th meeting, the Committee approved retroactively the election of Vladimír Kopal (Czech Republic) as Chairman of the Legal Subcommittee for the remainder of the term of that office.

E. Statements

15. At its 456th and 457th meetings, the Committee held a general exchange of views, in the course of which statements were made by the representatives of Colombia, Ecuador (on behalf of the Group of Latin American and Caribbean States), France, Germany, Greece, the Republic of Korea, Romania, India, Indonesia and the United States of America.

16. At the 456th meeting, the Director of the Office for Outer Space Affairs made a statement reviewing the work of the Office during the previous year, the situation regarding the preparations for the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III) and the documentation before the Committee.

17. At its 460th meeting, the Committee heard a statement by the Expert on Space Applications of the Office for Outer Space Affairs. At the 456th meeting, a special presentation was made by the representative of the American Institute of Aeronautics and Astronautics (AIAA) on the space exhibition for UNISPACE III.

18. After considering the various items before it, the Committee, at its 461st meeting, on 16 July 1999, adopted its report to the General Assembly containing the recommendations and decisions set out below.

Chapter II
Recommendations and decisions

A. Preparations for the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III) by the Preparatory Committee for UNISPACE III

1. Background

19. The Preparatory Committee for the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III) noted that the General Assembly, in its resolution 53/45 of 3 December 1998, had noted with satisfaction that the conference would be convened at the United Nations Office at Vienna from 19 to 30 July 1999 as a special session of the Committee on the Peaceful Uses of Outer Space, open to all States Members of the United Nations. The Preparatory Committee also noted that the Assembly, in paragraph 22 of resolution 53/45, had endorsed the recommendations of the Preparatory Committee at its 1998 session, contained in the report of the Committee on the Peaceful Uses of Outer Space on its forty-first session,[4] and had requested the Preparatory Committee, the Advisory Committee and the executive secretariat for UNISPACE III to carry out their tasks in accordance with those recommendations.

20. The Preparatory Committee noted that, in accordance with paragraph 18 of resolution 53/45, the Advisory Committee had reconvened the Working Group of the Whole, under the chairmanship of Ulrike Butschek (Austria), to assist the Advisory Committee in finalizing its preparatory work for UNISPACE III. The Preparatory Committee also noted that the chairperson had been assisted by Latha Reddy (India) in coordinating the work on organizational matters concerning UNISPACE III.

21. The Preparatory Committee also noted that, at its 1999 session, the Working Group of the Whole had had before it a note by the Secretariat (A/CONF.184/PC/1) containing the revised text of the full draft report, prepared on the basis of detailed comments made by the Preparatory Committee at its 1998 session, and the revised draft texts of the Vienna declaration on space and human development and the executive summary of the draft report. The Working Group had also had before it documents containing the recommendations of the regional preparatory conferences for UNISPACE III for Asia and the Pacific and for Africa and the Middle East (A/CONF.184/PC/L.5) and for Latin America and the Caribbean and for Eastern Europe (A/CONF.184/PC/L.5/Add.1). The Working Group had also had before it a report prepared by the Secretariat on organizational matters relating to the holding of UNISPACE III (A/CONF.184/PC/L.4) and conference room papers (A/CONF.184/PC/CRP.12 and Add.1) prepared by the Secretariat containing additional and updated information for that report.

22. Concerning the preparation of the draft report of UNISPACE III, the Working Group of the Whole had considered, section by section, the revised text of the draft report. On the basis of comments and proposals made in the Working Group, it had prepared a revised draft of the Vienna declaration (A/CONF.184/PC/CRP.18/Rev.1), to which all the recommendations of the regional preparatory conferences for UNISPACE III would be annexed. The Working Group had agreed that, on the basis of the comments made, the executive secretariat should revise the draft of the Vienna Declaration and finish preparing the draft report well ahead of the 1999 session of the Preparatory Committee, for distribution to all Member States.

23. The Preparatory Committee noted that the Working Group of the Whole had made recommendations on issues related to the organization of UNISPACE III, including the distribution of offices of the General Committee, the establishment of a drafting group, the allocation of agenda items and the schedule of work of the Plenary, Committee I and Committee II and arrangements for the activities of the Technical Forum (A/AC.105/719, annex II, paras. 12-17).

24. The Preparatory Committee also noted that the Advisory Committee, at its 1999 session, had adopted the report of the Working Group of the Whole and had noted that the report would provide the basis for the Preparatory Committee to finalize its preparations for UNISPACE III (A/AC.105/719, para. 17).

25. The Preparatory Committee also noted that the Legal Subcommittee, at its thirty-eighth session, in 1999, had reviewed the text of the subsection entitled "International space law" of the revised text of the draft report of UNISPACE III (A/CONF.184/PC/1) and had provided comments on the text. The Legal Subcommittee had agreed that those comments should be reflected in the final full draft report to be prepared by the Secretariat. The Legal Subcommittee had also agreed that comments made on paragraph 323 of the revised text of the draft report during its thirty-eighth session should be brought to the attention of the Preparatory Committee (A/AC.105/721, paras. 69-71).

26. The Preparatory Committee noted that the General Assembly, in paragraph 27 of resolution 53/45, had agreed that pre-Conference consultations by all States Members of

the United Nations should be convened on 18 July 1999 at the site of UNISPACE III, within existing resources, and had requested the Preparatory Committee to report during the consultations on the work that it had conducted. The Preparatory Committee noted that its recommendations concerning the organizational and procedural matters relating to UNISPACE III would be reflected in a document to be prepared by the Secretariat for consideration during the pre-Conference consultations.

2. Action taken by the Preparatory Committee

27. The Preparatory Committee, having considered the recommendations made by the Advisory Committee, endorsed the report of the Working Group of the Whole (A/AC.105/719, annex II). The Preparatory Committee agreed that the report of the Working Group provided the basis for the Preparatory Committee to carry out the task entrusted to it by the General Assembly in paragraph 22 of resolution 53/45.

(a) Preparations of the draft report

28. The Preparatory Committee had before it a note by the Secretariat (A/CONF.184/3 and Corr.1) containing the text of the draft report of UNISPACE III, which had been revised by the Secretariat on the basis of comments made by the Advisory Committee at its 1999 session. The text also reflected the comments made by the Legal Subcommittee at its thirty-eighth session, in 1999, on the subsection entitled "International space law" in an earlier version of the draft report (A/CONF.184/PC/1). The Preparatory Committee also had before it a conference room paper (A/CONF.184/PC/CRP.22) containing comments made by the Legal Subcommittee on text not included in that subsection, as well as technical corrections made by the European Association for the International Space Year.

29. The Preparatory Committee considered, section by section, the text of the draft report contained in the note by the Secretariat (A/CONF.184/3 and Corr.1). The Preparatory Committee agreed that the revised text contained in that document, together with the comments made on the text at its 1999 session, should be forwarded to UNISPACE III for consideration.

(b) Organization

30. With regard to the offices of the General Committee, the Preparatory Committee had before it a note verbale dated 12 July 1999 from the Russian Federation informing the Office for Outer Space Affairs that Yuri Koptev would not be able to fulfil his duties as Vice-Chairman of Committee I. The Preparatory Committee noted that Mr. Koptev had been recommended by the Advisory Committee as the candidate for that office. The Preparatory Committee agreed that Alexander V. Yakovenko (Russian Federation) should be the candidate for Vice-Chairman of Committee I and that the composition and distribution of the offices for UNISPACE III should be as follows: for the Plenary, U. R. Rao (India) as President, Raimundo González (Chile) as Vice-President, and Mohamed Aït Belaïd (Morocco) as Rapporteur-General; for Committee I, Dietrich Rex (Germany) as Chairman, Alexander V. Yakovenko (Russian Federation) as Vice-Chairman and R. A. Boroffice (Nigeria) as Vice-Chairman and Rapporteur; for Committee II, Shunji Murai (Japan) as Chairman, Vladimír Kopal (Czech Republic) as Vice-Chairman and Luiz Gylvan Meira Filho (Brazil) as Vice-Chairman and Rapporteur; and for the Technical Forum, Peter Jankowitsch (Austria) as Chairman.

31. Concerning the membership of the Drafting Group, to be chaired by the Rapporteur-General of the Plenary and to consist of two representatives from each of the five regional groups, chosen on the basis of the recommendations by the Advisory Committee (A/AC.105/719, annex II, para. 14), the Preparatory Committee agreed that the following individuals should be included in the Drafting Group: Dawlat Hassen (Egypt) and Mongezi Tshongweni (South Africa), for Africa; Sridhara Murthy (India) and Mazlan Othman (Malaysia), for Asia and the Pacific; Dumitru Dorin Prunariu (Romania) and Arif Mehdiyev (Azerbaijan), for Eastern Europe; Alejandra Bonilla (Colombia) and Héctor Raúl Peláez (Argentina), for Latin America and the Caribbean; and Gabriella Venturini (Italy) and Lynn F. H. Cline (United States of America), for Western Europe and other States.

32. The Preparatory Committee agreed that the Rapporteurs of Committee I and Committee II should also serve as the Vice-Chairmen of those bodies. The Preparatory Committee recommended that the text of rule 7, paragraph 1, of the provisional rules of procedure of UNISPACE III (A/CONF.184/2) should be modified to reflect that agreement. Having endorsed the recommendations of the Advisory Committee on the participation of national organizations and on the statements to be made by space-related international organizations without observer status with the General Assembly or the Committee on the Peaceful Uses of Outer Space (A/AC.105/719, annex II, paras. 18 and 19), the Preparatory Committee agreed that the texts of rules 15 and 16 of the provisional rules of procedure should be modified to reflect those recommendations.

(c) Voluntary contributions

33. The Preparatory Committee noted with appreciation that the Government of Austria, the province of Styria, the city of Graz and the city of Vienna had provided substantial financial assistance by renting space in the Austria Center Vienna, seconding a junior professional staff member to the Office for Outer Space Affairs, co-sponsoring the activities of the Technical Forum, in particular the Space Generation Forum, providing financial assistance to participants from developing countries and organizing social activities for participants of UNISPACE III. The Preparatory Committee also noted with appreciation the contributions of the Government of France, the Indian Space Research Organization, the National Space Development Agency of Japan and the National Oceanic and Atmospheric Administration of the United States of America for seconding experts to augment the capacity of the executive secretariat in preparing for and servicing UNISPACE III. The Preparatory Committee further noted with appreciation the cash and in-kind contributions by the Government of the United Kingdom of Great Britain and Northern Ireland, the Centre national d'études spaciales of France, the British National Space Centre and ESA, as well as AIAA, Austrian Aerospace, Austrian Airlines, Austrospace, the Boeing Company, Imax Filmtheater, Lockheed Martin Space Operations, Mobilkom Austria, Optikhaus Binder and Saab Ericsson Aerospace, which enabled the executive secretariat to support the organization of the Space Generation Forum, publish the final programme, reproduce posters, rent conference facilities and provide financial assistance to participants from developing countries.

34. The Preparatory Committee noted that the question of the participation of least developed countries had been raised in the Fourth Committee of the General Assembly at its fifty-third session. The Preparatory Committee noted with satisfaction that, through voluntary contributions, the executive secretariat had been able to provide a limited amount of financial assistance to delegations of least developed countries and persons from developing countries who would be participating in activities of the Technical Forum.

(d) Work to be conducted after UNISPACE III

35. The Preparatory Committee agreed that the executive secretariat should prepare a report, for submission to the General Assembly at its fifty-fourth session, on the organizational matters relating to UNISPACE III, providing other entities in the United Nations system with guidelines on using existing resources to organize a conference on global issues.

36. The Preparatory Committee recommended that the Working Group of the Whole be reconvened by the Scientific and Technical Subcommittee at its thirty-seventh session, in 2000, to assist the Subcommittee in considering its future work in the light of the recommendations of UNISPACE III.

B. Report of the Scientific and Technical Subcommittee on the work of its thirty-sixth session

37. The Committee took note with appreciation of the report of the Scientific and Technical Subcommittee on the work of its thirty-sixth session (A/AC.105/719), covering the results of its deliberations on the items assigned to it by the General Assembly in resolution 53/45.

1. Space debris

38. The Committee noted that, in accordance with resolution 53/45, the Scientific and Technical Subcommittee had continued its consideration of the agenda item on space debris on a priority basis. The Committee took note of the discussion of the Subcommittee on space debris, as reflected in its report (A/AC.105/719, paras. 19-42).

39. The Committee agreed with the Scientific and Technical Subcommittee that consideration of space debris was important and that international cooperation was needed to expand appropriate and affordable strategies to minimize the potential impact of space debris on future space missions and that Member States should pay more attention to the problem of collisions of space objects, including those with nuclear power sources, with space debris, and other aspects of space debris, in accordance with paragraph 31 of resolution 53/45 (A/AC.105/719, paras. 20 and 21). The Committee also agreed that national research on space debris should continue.

40. The Committee noted with satisfaction that, following the invitation of the Scientific and Technical Subcommittee, a representative of the Inter-Agency Space Debris Coordination Committee (IADC) had made a technical presentation on the subject of space debris mitigation practices. The Committee agreed with the Scientific and Technical Subcommittee that IADC should be invited to make a technical presentation on its work to the thirty-seventh session of the Subcommittee (A/AC.105/719, para. 25).

41. The Committee noted with satisfaction that the Scientific and Technical Subcommittee had concluded its

work according to the multi-year work plan that it had adopted at its thirty-second session to address specific topics relating to space debris to be covered during the period 1996-1998. In particular, the Committee noted that the Subcommittee had adopted its draft technical report on space debris (A/AC.105/707), which contained the technical changes and amendments proposed during the inter-sessional period, together with the changes proposed by the drafting group during the thirty-sixth session of the Subcommittee (A/AC.105/719, para. 35).

42. The Committee noted with satisfaction that the Subcommittee had submitted to it the final text of the technical report on space debris (A/AC.105/720). The Committee recommended that the technical report should be widely distributed, including by making it available to UNISPACE III, the Legal Subcommittee at its thirty-ninth session, in 2000, international entities, such as COSPAR, IAA, IAF and IADC, and scientific gatherings such as the annual IAF Congress.

43. The Committee agreed that the adoption of the technical report on space debris at its thirty-sixth session was an important achievement. It also agreed that, owing to the complexity of the space debris issue, discussions should continue in order to ensure further progress in developing an understanding of the issue. It also agreed that IADC, as the international organization of experts on space debris, should continue to brief the Subcommittee on the issue on an annual basis, that the Subcommittee should assess the effectiveness of existing mitigation practices and the extent to which they were being implemented and that efforts to model and characterize the debris environment should continue. The technical report on space debris should be reviewed as appropriate and should be updated as new technological developments occurred and as the technical understanding of the space debris environment improved.

44. The Committee agreed that the Subcommittee, at its thirty-seventh session, should review international application of the International Telecommunication Union (ITU) standards and IADC recommendations concerning the disposal of satellites in geosynchronous orbit at the end of their useful life. The area of focus could be expanded to include the disposal of upper stages used to achieve geosynchronous orbits and debris issues associated with geosynchronous transfer orbits. The Committee recommended that, to facilitate the review by the Subcommittee, the Secretariat should compile relevant data on space objects in geosynchronous orbit.

45. Some delegations expressed the view that, in view of the completion by the Scientific and Technical Subcommittee of the multi-year work plan and the technical report on space debris, the Committee should request the Legal Subcommittee to consider presenting its views on the applicability of the existing outer space treaties in relation to space debris, as proposed in the working paper (A/AC.105/L.221 and Corr.1) presented by France on behalf of Austria, Canada, the Czech Republic, Germany, Greece, Hungary, India, Italy, Poland, Portugal, Sweden and the United Kingdom of Great Britain and Northern Ireland, and reproduced in annex II to the present report. Other delegations expressed the view that it was still premature for the Legal Subcommittee to discuss the issue of space debris and that the discussion should be postponed at least until the technical report had been thoroughly analysed by Member States and relevant space-related organizations and industry.

46. The view was expressed that a database on space debris should be developed.

47. The Committee agreed that the Scientific and Technical Subcommittee should continue the consideration of space debris, as a priority item, at its thirty-seventh session.

2. The United Nations Programme on Space Applications and the coordination of space activities within the United Nations system

(a) United Nations Programme on Space Applications

48. At the outset of the deliberations on the subject, the Expert on Space Applications reviewed the activities carried out and planned under the United Nations Programme on Space Applications during the period 1998-1999. The Committee expressed its appreciation to the Expert for the manner in which he had implemented the activities of the Programme within the limited funds at his disposal, in particular, the organization of the regional preparatory conferences for UNISPACE III.

49. The Committee took note of the activities of the Programme as set out in the report of the Scientific and Technical Subcommittee (A/AC.105/719, paras. 47-57). The Committee was pleased to note that further progress was being made in the implementation of the activities of the Programme planned for 1999.

(i) United Nations conferences, training courses and workshops

50. With regard to the United Nations workshops, training courses and conferences carried out in the first half of 1999, the Committee expressed its appreciation to the following:

(a) The Government of Romania, as well as ESA, for co-sponsoring the Regional Preparatory Conference for the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space for Eastern Europe, hosted by the Romanian Space Agency and held in Bucharest from 25 to 29 January 1999;

(b) The Government of Jordan, as well as ESA, for co-sponsoring the Workshop on Basic Space Science, held in Mafraq, Jordan, from 13 to 17 March 1999;

(c) AIAA, for organizing the Workshop on International Space Cooperation: Solving Global Problems, held in Bermuda from 11 to 15 April 1999;

(d) The Government of Sweden, represented by the Swedish International Development Agency, for co-sponsoring the Ninth United Nations/Sweden International Training Course on Remote Sensing Education for Educators, held in Stockholm and Kiruna, Sweden, from 3 May to 11 June 1999.

51. The Committee endorsed the programme of United Nations workshops, training courses, symposia and conferences planned for the remaining part of 1999, including the following, which were described in the report of the Expert on Space Applications (A/AC.105/715, annex IV):

(a) United Nations/China/ESA Conference on Space Applications in Promoting Sustainable Agriculture, to be held in Beijing from 14 to 17 September 1999;

(b) Second United Nations/Spain Workshop on Space Technology for Emergency Aid/Search and Rescue Satellite-Aided Tracking System for Ships in Distress, to be held in Maspalomas, Gran Canaria, Spain, in September 1999;

(c) United Nations/IAF Workshop on Space: An Integral Part of Sustainable Development, being co-sponsored by ESA and the European Commission and organized in cooperation with the Government of the Netherlands and the International Institute for Aerospace Survey and Earth Sciences, to be held in Amsterdam and Enschede, Netherlands, from 30 September to 3 October 1999;

(d) Regional workshop on the role of the African Regional Centre for Space Science and Technology Education — in English language in national and regional development, to be held in Ile-Ife, Nigeria, in September 1999;

(e) Post-UNISPACE III briefing at the Second Asia-Pacific Ministerial Conference on Space Applications for Sustainable Development, to be held in New Delhi from 15 to 20 November 1999.

52. The Committee endorsed the following programme of workshops, training courses, symposia and conferences planned for 2000:

(a) Tenth United Nations/Sweden International Training Course on Remote Sensing Education for Educators;

(b) United Nations/ESA/COSPAR Workshop on Data Analysis Techniques, to be held in India;

(c) United Nations/Austria symposium on space technology and development, to be held in Graz, Austria;

(d) United Nations/IAF workshop on space technology for the benefit of developing countries, to be held in Rio de Janeiro;

(e) Ninth United Nations/ESA Workshop on Basic Space Science: Satellites and Networks of Telescopes — Tools for Global Participation in the Study of the Universe, to be held in Toulouse, France, from 13 to 16 June 2000.

53. The Committee noted that other activities would be organized under the auspices of the United Nations Programme on Space Applications on the basis of recommendations of UNISPACE III.

54. The Committee noted with appreciation financial contributions of $22,000 from the Government of Austria and $85,000 from ESA to implement the activities of the Programme.

55. The Committee noted with appreciation the provision, by host countries and entities, of experts to serve as instructors and speakers in activities of the United Nations Programme on Space Applications. It also noted the financial and other assistance that had been or would be provided to the Programme by the Department of Physical Geography of Stockholm University, Sweden; the Centro Espacial de Canarias of the Instituto Nacional de Técnica Aeroespacial of Spain; the Institute of Astronomy and Space Sciences, Al al-Bayt University, Jordan; the Ministry of Science and Technology and the Ministry of Agriculture of China; the Romanian Space Agency; and SSC Satellitbild, Sweden.

(ii) Long-term fellowships for in-depth training

56. The Committee expressed appreciation to ESA for having offered five training fellowships and to the Government of China for having offered two fellowships in various areas relating to space activities for the period 1998-1999. The status of the fellowships for the period 1998-1999 and the countries whose candidates had received fellowships

were indicated in the report of the Expert on Space Applications (A/AC.105/715, annex II).

57. The Committee noted that it was important to increase the opportunities for in-depth education in all areas of space science and technology and related applications projects through long-term fellowships and urged Member States to make such opportunities available at their relevant institutions.

(iii) Technical advisory services

58. The Committee noted that the Programme had provided technical advisory services in support of projects on regional space applications, as indicated in the report of the Expert on Space Applications (A/AC.105/715, paras. 20-35), including the following:

(a) Assistance in the growth and operation of the Asia-Pacific Satellite Communications Council;

(b) Collaboration with several African countries on the implementation of the project on cooperative information network linking scientists, educators, professionals and decision makers in Africa (COPINE), pursuant to one of the recommendations of the United Nations Regional Conference on Space Technology for Sustainable Development in Africa, held in Dakar from 25 to 29 October 1993, regarding the establishment, as a matter of urgency, of an efficient communications network among African and European professionals and scientists at the national, continental and intercontinental levels;

(c) Collaboration with ESA on follow-up activities relating to the series of workshops on basic space science and on the use of Earth observation data;

(d) Follow-up to the United Nations international training course series in Sweden on remote sensing education for educators;

(e) Contribution to the Committee on Earth Observation Satellites proposal on the Integrated Global Observing Strategy.

(iv) Promotion of greater cooperation in space science and technology

59. The Committee noted that the United Nations was collaborating with international professional bodies within the space community to promote the exchange of experience on space activities. The United Nations Programme on Space Applications had co-sponsored the United Nations/IAF Workshop on Expanding the User Community of Space Technology in Developing Countries, held in Melbourne, Australia, in September 1998, in conjunction with the forty-ninth IAF Congress. Participants from developing countries at the Workshop also attended the Congress.

60. The Committee noted that the United Nations Programme on Space Applications had co-sponsored the participation of scientists from developing countries in the thirty-second Scientific Assembly of COSPAR, held in Nagoya, Japan, from 12 to 19 July 1998.

61. The Committee noted that the United Nations Programme on Space Applications would co-sponsor the participation of scientists from developing countries in the United Nations/IAF Workshop on Space: An Integral Part of Sustainable Development, to be held in Amsterdam and Enschede from 30 September to 3 October 1999, in conjunction with the fiftieth IAF Congress, and that participants at the Workshop would also attend the Congress, which would be held from 4 to 8 October 1999.

(b) International space information service

62. The Committee noted with satisfaction that the Office for Outer Space Affairs had continued to develop a World Wide Web home page (http://www.un.org.@/OOSA/index.html), including both information sources within the United Nations system and access to external databases.

63. The Committee noted with satisfaction the publication of the document entitled "Seminars of the United Nations Programme on Space Applications: Selected Papers on Remote Sensing, Space Science and Information Technology" (A/AC.105/711).

64. The Committee noted with satisfaction the publication of a booklet entitled *Space for Development*, which gave detailed descriptions of past and current activities of the United Nations Programme on Space Applications and an indication of its future activities.

(c) Coordination of space activities within the United Nations system and inter-agency cooperation

65. The Committee noted that the General Assembly, in paragraph 24 of its resolution 53/45, had encouraged all Member States, organizations within the United Nations system and other international organizations with space activities to contribute actively to achieving the objectives of UNISPACE III.

66. The Committee continued to stress the necessity of ensuring continuous and effective consultations and coordination in the field of outer space activities among organizations within the United Nations system and the avoidance of duplicative activities. The Committee also

noted that the United Nations Programme on Space Applications should enhance coordination efforts with regional space events such as the Regional Space Applications Programme for Sustainable Development in Asia and the Pacific of the Economic and Social Commission for Asia and the Pacific.

67. The Committee noted with satisfaction that the Inter-Agency Meeting on Outer Space Activities had held its nineteenth session at the United Nations Office at Vienna on 2 and 3 June 1998 and that the report on its deliberations (A/AC.105/701) and the report of the Secretary-General on coordination of outer space activities within the United Nations system: programme of work for 1998 and 1999 and future years (A/AC.105/700) were before the Committee.

68. The Committee noted that the sessions of the Inter-Agency Meeting on Outer Space Activities would continue to be convened at the United Nations Office at Vienna and to be hosted by the Office for Outer Space Affairs prior to the sessions of the Scientific and Technical Subcommittee each year, without prejudice to any invitation by an interested agency to host a session at its headquarters. The Committee noted that the twentieth session of the Inter-Agency Meeting on Outer Space Activities, scheduled to be held at the United Nations Office at Vienna from 2 to 4 February 2000, would address, among other things, coordination of activities related to the plan of action of UNISPACE III.

(d) Regional and interregional cooperation

69. The Committee noted with appreciation the continuing efforts undertaken by the United Nations Programme on Space Applications, in accordance with General Assembly resolution 45/72 of 11 December 1990, in leading an international effort to establish regional centres for space science and technology education in existing national or regional educational institutions in developing countries. The Committee also noted that, once established, each centre could expand and become part of a network that could cover specific programme elements related to space science and technology in established institutions in each region.

70. The Committee recalled that the General Assembly, in its resolution 50/27 of 6 December 1995, had endorsed the recommendation of the Committee that the centres be established on the basis of affiliation to the United Nations as early as possible and that such affiliation would provide the centres with the necessary recognition and would strengthen the possibilities of attracting donors and of establishing academic relationships with national and international space-related institutions.

71. The Committee recalled that the General Assembly, in its resolution 53/45, had noted with satisfaction that, in accordance with paragraph 30 of its resolution 50/27, the Centre for Space Science and Technology Education in Asia and the Pacific had continued its education programme in 1998 and that significant progress had been achieved in establishing regional centres for space science and technology education in the other regions.

72. The Committee noted with satisfaction that the Centre for Space Science and Technology Education in Asia and the Pacific had commenced its seventh nine-month course at the Space Applications Centre at Ahmedabad, India, on 1 July 1999. The course would continue until 31 March 2000. The theme of the course was satellite communications.

73. The Committee recommended that the Member States concerned in Asia and the Pacific should hold further consultations, with the assistance of the Office for Outer Space Affairs, with a view to making the Centre for Space Technology Education in Asia and the Pacific grow into a network of nodes.

74. The Committee noted with satisfaction that the African Regional Centre for Space Science and Technology — in French language had been inaugurated on 24 October 1998 in Morocco. The Committee also noted with satisfaction: (a) that the Regional Centre would convene a first session of training in remote sensing and geographic information systems in January 2000 and a second session of training in space telecommunication in the spring of 2000; (b) that the Regional Centre had prepared a questionnaire to be sent to Member States, for completion by scientists and specialized institutions, and that the information gathered by means of the questionnaire would be incorporated in an annual directory of information on African capabilities in space science and technology; and (c) that the Regional Centre was planning to organize a workshop on its scientific orientation, in order to identify the needs of African countries in the area of space science and technology, and that the workshop would be held before the convening of the regular meeting of its Administrative Council, which was expected to be held in late October and early November 1999.

75. The Committee also noted with satisfaction that the African Regional Centre for Space Science and Technology Education — in English language had been inaugurated on 24 November 1998 in Nigeria. A document on the proposed activities of the Regional Centre, which had been developed for implementation in March 1999, as well as other matters relating to the Regional Centre, would be reviewed at the resumed session of the Governing Board in September 1999.

76. The Committee noted with satisfaction that the regional Centre for Space Science and Technology Education in Latin America and the Caribbean, to be located in Brazil and Mexico, was to be inaugurated in 1999 and that, in preparation for the opening of the campus of the Centre in Brazil, the National Institute for Space Research of Brazil had carried out a number of activities for the benefit of States in the region, as presented in the report of the Expert on Space Applications (A/AC.105/715, para. 12).

77. The Committee noted that missions had been sent to Jordan and the Syrian Arab Republic from 24 June to 1 July 1998 to evaluate the establishment of a regional centre for space science and technology education in western Asia and that the reports of those missions were being finalized, in consultation with the Governments of the two countries, with a view to selecting a host country for the Centre.

78. The Committee noted that a mission had been sent to Bulgaria, Greece, Hungary, Poland, Romania and Turkey from 24 November to 7 December 1998, with the objective of undertaking a technical study and providing a report that could be used in determining an agreed framework for the operation of the Network of Space Science and Technology Education and Research Institutions for Central, Eastern and South-Eastern Europe. The Committee also noted that the Steering Committee for the Network had held a meeting in February 1999 to discuss further procedures for the operation of the Network.

79. The Committee noted that the satellite-based COPINE project would offer an excellent opportunity for the exchange of information needed to promote progress in health care, agriculture, education, science and technology, and the management and survey of natural resources and the environment in Africa. The Committee noted that such cooperation would provide long-term benefits to the participating African countries and would contribute to economic growth in the region. The Committee also noted that the Provisional Governing Board of COPINE, at its meeting held in London on 27 April 1998, had made conclusions and recommendations concerning the future of the project (A/AC.105/715, para. 21). It was noted that the Office for Outer Space Affairs was continuing consultations on the implementation of the project with a number of interested countries.

80. The Committee noted with satisfaction that the regional preparatory conferences for UNISPACE III had served to promote regional and interregional cooperation.

81. The Committee emphasized the importance of regional and international cooperation in making the benefits of space technology available to all countries by such cooperative activities as sharing payloads, disseminating information on spin-off benefits, ensuring compatibility of space systems and providing access to launch capabilities at reasonable cost.

3. Future work of the Scientific and Technical Subcommittee

82. The Committee noted with satisfaction that the theme fixed for special attention at the thirty-seventh session of the Scientific and Technical Subcommittee should be "Space commercialization: an era of new opportunities". The Committee also noted that COSPAR and IAF, in liaison with Member States, should be invited to arrange a symposium with as wide a participation as possible, to be held during the first week of the thirty-seventh session of the Subcommittee, in order to complement its discussions on the special theme (A/AC.105/719, para. 81).

83. The Committee recalled that, at its forty-first session, it had agreed that the Scientific and Technical Subcommittee and the Legal Subcommittee would invite special presentations on new launch systems and ventures at their sessions in 2000 with a view to attaining a better understanding of those launch activities.[5]

84. In accordance with the four-year work plan of the Scientific and Technical Subcommittee, which had been endorsed by the General Assembly in paragraph 16 of its resolution 53/45, for consideration of the agenda item on the use of nuclear power sources in outer space, the Committee requested the Secretariat to invite Member States and international organizations to submit to the Subcommittee at its thirty-seventh session, in 2000, information on the identification of terrestrial processes and technical standards that might be relevant to nuclear power sources, including factors that distinguished nuclear power sources in outer space from terrestrial nuclear power sources.

85. The Committee considered the proposal submitted to the Scientific and Technical Subcommittee by Germany, on behalf of Austria, Canada, China, the Czech Republic, France, Greece, Hungary, Italy, Japan, Morocco, Romania, the Russian Federation, Spain, Sweden, Turkey, the United Kingdom of Great Britain and Northern Ireland and the United States of America, in a working paper entitled "Proposal on revising the agenda of the Scientific and Technical Subcommittee following the convening of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space" (A/AC.105/C.1/L.227).

86. Following discussion of that proposal, the Committee agreed to adopt a revised agenda structure for the Scientific and Technical Subcommittee and the draft provisional

agendas for the Subcommittee at its sessions in 2000 and 2001, which are contained in section A of annex I to the present report.

C. Report of the Legal Subcommittee on the work of its thirty-eighth session

87. The Committee took note with appreciation of the report of the Legal Subcommittee on the work of its thirty-eighth session (A/AC.105/721), which contained the results of its deliberations on the items assigned to it by the General Assembly in resolution 53/45.

1. Question of review and possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space

88. The Committee noted that, in accordance with resolution 53/45 and as reflected in the report of the Legal Subcommittee (A/AC.105/721, paras. 19-25), the Subcommittee had considered the item relating to the review and possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space, adopted by the General Assembly in its resolution 47/68 of 14 December 1992.

89. The Committee agreed that the Principles would remain valid for the time being and that the Scientific and Technical Subcommittee should consider the need for revision in the light of changing technology before the Legal Subcommittee or the Committee undertook any actual revision.

90. The Committee endorsed the recommendation of the Legal Subcommittee (A/AC.105/721, para. 22) that consideration of the Principles by its Working Group on agenda item 3 should be suspended at its thirty-ninth session, pending the results of the work in the Scientific and Technical Subcommittee, without prejudice to the possibility of reconvening the Working Group if, in the opinion of the Legal Subcommittee, sufficient progress had been made in the Scientific and Technical Subcommittee at its thirty-seventh session, in 2000, to warrant the reconvening of the Working Group by the Legal Subcommittee.

91. The Committee recommended that the item concerning nuclear power sources be retained on the agenda of the Legal Subcommittee to give delegations the opportunity to discuss it in plenary meetings.

2. Matters relating to the definition and delimitation of outer space and to the character and utilization of the geostationary orbit, including consideration of ways and means to ensure the rational and equitable use of the geostationary orbit without prejudice to the role of the International Telecommunication Union

92. The Committee noted that, in accordance with resolution 53/45, the Legal Subcommittee, through its Working Group on agenda item 4, under the chairmanship of Daniel Eduardo Amigo (Argentina), had continued to consider matters relating to the definition and delimitation of outer space and to the character and utilization of the geostationary orbit.

93. The Committee noted the work carried out by the Legal Subcommittee and the Working Group, as reflected in their reports (A/AC.105/721, paras. 26-41 and annex I).

94. The Committee took note of the deliberations on the question of the geostationary orbit as contained in the report of the Legal Subcommittee. The Committee also noted that an exchange of views had taken place on the subject, in particular on the basis of the ideas formulated in working papers entitled "Some considerations concerning the utilization of the geostationary satellite orbit" (A/AC.105/C.2/L.200 and Corr.1), submitted by Colombia to the Legal Subcommittee at its thirty-fifth session; "An analysis of the compatibility of the approach contained in the working paper entitled 'Some considerations concerning the utilization of the geostationary satellite orbit' with the existing regulatory procedures of the International Telecommunication Union relating to the use of the geostationary orbit" (A/AC.105/C.2/L.205), prepared by the Secretariat in cooperation with ITU and submitted to the Subcommittee at its thirty-sixth session; and a conference room paper (A/AC.105/C.2/1997/CRP.3/Rev.1) containing a compendium of relevant sections and/or documents referred to in the working paper submitted by Colombia, which had been before the Subcommittee at its thirty-sixth session.

95. The Committee also noted that the exchange of views on the question of the geostationary orbit had taken into account the agreement that had been achieved concerning universal acceptance of the scientific principles formulated in the working paper submitted by the Czech Republic to the Scientific and Technical Subcommittee at its thirty-fifth session entitled "Examination of the physical nature and technical attributes of the geostationary orbit; examination of its utilization and applications, including, *inter alia*, in the field of space communications, as well as other questions relating to space communications developments, taking

particular account of the needs and interests of developing countries" (A/AC.105/C.1/L.216).

96. The Committee noted that the Chairman of the Group of Latin American and Caribbean States had expressed the view that the item on the character and utilization of the geostationary orbit remained of particular interest to the States that were members of the Group and that it should therefore continue to be considered by the Committee and by the Legal Subcommittee until such time as the issues related to it had been resolved to the satisfaction of all States. The Group was also of the view that the working paper submitted by Colombia to the Legal Subcommittee at its thirty-fifth session (A/AC.105/C.2/L.200 and Corr.1) could serve as the basis for further progress in the consideration of the item.

97. Some delegations reiterated the view that the geostationary orbit, because of its particular characteristics, required a special, *sui generis* legal regime to regulate access and utilization by all States, taking into account the needs of developing countries. The view was also expressed that the needs of equatorial countries should also be taken into account in that regard.

98. Other delegations held the view that, because the geostationary orbit was an integral part of outer space, the legal regime established by the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and other Celestial Bodies,[6] adequately covered activities in and related to the geostationary orbit.

99. The Committee noted that the Secretariat had been requested to prepare, in cooperation with ITU, an update of documents A/AC.105/C.2/L.205 and A/AC.105/C.2/1997/CRP.3/Rev.1 with a view to continuing the examination of the working paper submitted by Colombia (A/AC.105/L.200 and Corr.1) to the Legal Subcommittee.

100. The Committee recommended that the Legal Subcommittee continue its consideration of the item at its thirty-ninth session, in 2000.

3. Review of the status of the five international legal instruments governing outer space

101. The Committee noted that, in accordance with resolution 53/45, the Legal Subcommittee had, through the establishment of a Working Group under the Chairmanship of Vassilios Cassapoglou (Greece), continued its review of the status of the five international legal instruments governing outer space, with a view to promoting greater adherence to the instruments.

102. The Committee recalled that the purpose of the agenda item was not in any way to reopen substantive debate on or to revise or amend the five international legal instruments governing outer space.

103. The Committee noted the work carried out by the Legal Subcommittee and the Working Group on agenda item 5, as reflected in their reports (A/AC.105/721, paras. 42-55 and annex II).

104. The Committee noted that some delegations had informed the Legal Subcommittee of the current status of and further action planned concerning their accession to the five international legal instruments governing outer space. One delegation submitted similar information to the Committee.

105. The Committee noted that an exchange of views had taken place in the Legal Subcommittee on the status of the five international legal instruments governing outer space, in particular on the basis of the ideas formulated in a note by the Secretariat on the review of the status of the five international legal instruments governing outer space (A/AC.105/C.2/L.210 and Add.1) and working papers on the same subject submitted by Germany, on behalf of the States members of ESA and States having signed cooperation agreements with ESA (A/AC.105/C.2/L.211/Rev.1, paras. 2-9), and by the Russian Federation (A/AC.105/C.2/L.213).

106. The Committee noted the recommendations of the Working Group (A/AC.105/721, annex II, paras. 13 and 14) and recommended that the Legal Subcommittee continue its consideration of the item at its thirty-ninth session, in 2000.

4. Other matters

(a) Contribution of the Legal Subcommittee to the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III)

107. The Committee noted that the Legal Subcommittee had considered the draft report of UNISPACE III an had provided comments that would be reflected in the text of the draft report to be considered at the Conference.

108. The Committee noted that the Legal Subcommittee had considered the draft report of its Chairman to UNISPACE III on its work and had provided comments with the understanding that the final report would reflect the views of the Chairman and not necessarily the collective views of the Subcommittee.

(b) Future agenda of the Legal Subcommittee

109. The Committee noted that the Legal Subcommittee had continued to conduct informal consultations with a view to drawing up a list of annotated items agreed upon by consensus that could be considered by the Committee for possible inclusion in the agenda of the Subcommittee. The views of the Subcommittee on the matter are contained in its report (A/AC.105/721, paras. 58-65).

110. Some delegations expressed the view that the work of the Legal Subcommittee should be revitalized, including the development of additional agenda items for its consideration. The view was expressed, however, that the focus of the Subcommittee should be on making a useful contribution to meeting the interests of all States, rather than simply generating new legal standards regulating space-related activity.

111. Some delegations expressed their support for the proposal in a working paper submitted by Argentina, entitled "Work plan for implementation in connection with the item entitled 'Commercial aspects of space activities'" (A/AC.105/C.2/L.215), which was contained in an annex to the report of the Legal Subcommittee (A/AC.105/721, annex III).

112. The view was expressed that, in view of the finalization by the Scientific and Technical Subcommittee at its 1999 session of the technical report on space debris (A/AC.105/720), it was an appropriate time for the Legal Subcommittee to consider including in its agenda an item entitled "Review of existing norms of international law applicable to space debris", as proposed by the delegation of the Czech Republic (A/AC.105/721, para. 59 (b)).

113. The Committee noted that inter-sessional consultations on the concept of the "launching State", held in Bonn, Germany, on 9 December 1998 and open to all interested member States, had resulted in a new item entitled "Review of the concept of the 'launching State'" being added to the list of items for possible inclusion in the agenda of the Legal Subcommittee. The report on the inter-sessional consultations (A/AC.105/L.217) had been made available to the Legal Subcommittee at its thirty-eighth session. In accordance with the mandate for the inter-sessional consultations from the Committee at its forty-first session,[7] the results of the consultations would be formally presented to the Committee for consideration and adoption at its current session.

114. The Committee agreed that a new item entitled "Review of the concept of the 'launching State'" should be included in the agenda of the Legal Subcommittee. The item would be considered by a working group during a three-year period beginning in the year 2000 in accordance with the following schedule of work:

2000 Special presentations on new launch systems and ventures

2001 Review of the concept of the "launching State" as contained in the Convention on International Liability for Damage Caused by Space Objects[8] and the Convention on Registration of Objects Launched into Outer Space[9] as applied by States and international organizations

2002 Review of measures to increase adherence to and promote the full application of the Convention on International Liability for Damage Caused by Space Objects and the Convention on Registration of Objects Launched into Outer Space

115. The Committee recalled its decision at its forty-first session that the Scientific and Technical Subcommittee and the Legal Subcommittee should invite special presentations on new launch systems and ventures at their sessions in 2000 with a view to attaining a better understanding of those launch activities.[10]

116. The Committee considered the proposal submitted to the Legal Subcommittee by Germany, on behalf of Austria, Canada, France, Greece, India, the Netherlands, Sweden and the United States of America, in a working paper entitled "Revision of the agenda of the Legal Subcommittee" (A/AC.105/721, annex IV, sect. A).

117. Following discussion of that proposal, the Committee agreed to adopt a revised agenda structure for the Legal Subcommittee and the agenda for its thirty-ninth session, in 2000, as contained in section B of annex I to the present report.

D. Other matters

1. Reports to the Committee

118. The Committee noted with appreciation the participation in its work and in that of its Subcommittees of representatives of the Food and Agriculture Organization of the United Nations, UNESCO, WMO, ITU, IAEA, COSPAR, ESA, IAA, IAF, IAU, the International Law Association, INTERSPUTNIK, ISPRS and the International Telecommunications Satellite Organization. The Committee expressed appreciation to those organizations which had submitted reports on their activities and requested interested organizations to continue to keep it informed of their activities relating to the peaceful uses of outer space.

119. The Committee recommended that the Secretariat invite Member States to submit annual reports on their space activities. In addition to information on national and international space programmes, the reports could include information on spin-off benefits of space activities and other topics requested by the Committee and its subsidiary bodies.

2. Members of the Bureau

120. The Committee noted that the General Assembly, in paragraph 9 of its resolution 53/45, had taken note of the agreement reached by the Committee at its fortieth session on the composition of the bureaux of the Committee and its subsidiary bodies for the second term starting in 2000, in the context of the implementation of the measures relating to the working methods of those bodies, which were endorsed by the Assembly in paragraph 11 of its resolution 52/56 of 10 December 1997.

121. The Committee noted that the Group of African States had nominated Mohamed Aïd Belaïd (Morocco) as its candidate for the office of the First Vice-Chairman of the Committee. The Committee also noted that the Group of Asian States had nominated G. M. Nair (India) and H. Djojodihardjo (Indonesia) as its candidates for that office. In view of the fact that further consultations would be required on the matter of the members of the bureaux for the second three-year term, the Committee agreed that consultations among delegations and regional groups should be held with a view to reaching consensus on the matter by the 2000 session of the Scientific and Technical Subcommittee.

E. Future work

122. The Committee noted the views of the Scientific and Technical Subcommittee on the future role and work of the Subcommittee (A/AC.105/719, paras. 77-90). The Committee also noted that the proposal contained in a working paper submitted by Germany on behalf of Austria, Canada, China, the Czech Republic, France, Greece, Hungary, Italy, Japan, Morocco, Romania, the Russian Federation, Spain, Sweden, Turkey, the United Kingdom of Great Britain and Northern Ireland and the United States of America (A/AC.105/C.1/L.227), submitted to the Scientific and Technical Subcommittee at its thirty-sixth session in 1999, could constitute the basis for consensus at the current session of the Committee, while in addition taking into consideration the views expressed by other delegations.

123. At its 461st meeting, the Committee agreed on a new agenda structure and agenda items for the Scientific and Technical Subcommittee, to be included in the provisional agenda for the year 2000, as contained in section A of annex I to the present report.

124. Regarding the agenda of the Legal Subcommittee, the Committee noted that a proposal had been submitted by Germany on behalf of Austria, Canada, France, Greece, India, the Netherlands, Sweden and the United States of America (A/AC.105/C.2/L.217 and Corr.1) to the Legal Subcommittee at its thirty-eighth session.

125. At its 461st meeting the Committee agreed on a new agenda structure and agenda items for the Legal Subcommittee to be included in the provisional agenda for the year 2000, as contained in section B of annex I to the present report.

F. Schedule of work of the Committee and its subsidiary bodies

126. The Committee agreed on the following tentative timetable for its session and those of its Subcommittees in 2000:

	Date	*Location*
Scientific and Technical Subcommittee	7-18 February	Vienna
Legal Subcommittee	27 March-7 April	Vienna
Committee on the Peaceful Uses of Outer Space	14-23 June	Vienna

Notes

[1] Malaysia and Peru are also members of the Committee and have rotated every two years since 1 January 1995 with the Republic of Korea and Cuba, respectively.

[2] *Official Records of the General Assembly, Fifty-second Session, Supplement No. 20* (A/52/20), annex I, para. 2.

[3] Ibid.

[4] *Official Records of the General Assembly, Fifty-third Session, Supplement No. 20* (A/53/20), paras. 23-44.

[5] *Official Records of the General Assembly, Fifty-third Session, Supplement No. 20* (A/53/20), para. 153.

[6] General Assembly resolution 2222 (XXI), annex.

[7] *Official Records of the General Assembly, Fifty-third Session, Supplement No. 20* (A/53/20, para. 152.

[8] General Assembly resolution 2777 (XXVI) annex.

[9] General Assembly resolution 3235 (XXIX), annex.

[10] *Official Records of the General Assembly, Fifty-third Session, Supplement No. 20* (A/53/20), para. 153.

Annex I

Agendas of the Scientific and Technical Subcommittee and the Legal Subcommittee

A. Agenda of the Scientific and Technical Subcommittee

1. Taking into account paragraphs 14 and 15 of General Assembly resolution 53/45 of 3 December 1998,[a] referred to in the provisional agenda of the Scientific and Technical Subcommittee at its thirty-sixth session, in 1999 (A/AC.105/C.1/L.225), and in view of the organization of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III) in Vienna from 19 to 30 July 1999 as a special session of the Committee on the Peaceful Uses of Outer Space, open to all States Members of the United Nations, the Committee adopted the following agenda structure for the Scientific and Technical Subcommittee and agendas for the thirty-seventh and thirty-eighth sessions of the Subcommittee, in 2000 and 2001, respectively:

Items to be included in the draft provisional agenda of the Scientific and Technical Subcommittee at its thirty-seventh session, in 2000

1. General exchange of views and introduction to reports submitted on national activities.[b]
2. The United Nations Programme on Space Applications and the coordination of space activities within the United Nations system following the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III).
3. Matters relating to remote sensing of the Earth by satellites, including applications for developing countries and monitoring of the Earth's environment.
4. Agenda items considered under work plans:

   Use of nuclear power sources in outer space:

   First year of the work plan: identification of terrestrial processes and technical standards that may be relevant to nuclear power sources, including factors that distinguish nuclear power sources in outer space from terrestrial nuclear applications.[c]

5. Single issues/items for discussion:
   (a) International cooperation in human spaceflight;
   (b) Presentations on new launch systems and ventures;
   (c) Space debris:[d]

   Subject for 2000: review of international application of the International Telecommunication Union (ITU) standards and recommendations of the Inter-Agency Space Debris Coordination Committee concerning the disposal of satellites in geosynchronous orbit at the end of their useful life. The area of focus should be expanded to include the disposal of upper stages used to achieve geosynchronous orbits and debris issues associated with geosynchronous transfer orbits;

   (d) Examination of the physical nature and technical attributes of the geostationary orbit and of its utilization and applications, including in the field of space communications, as well as other questions relating to developments in space communications, taking particular account of the needs and interests of developing countries.
6. Draft provisional agenda of the Scientific and Technical Subcommittee at its thirty-eighth session, in 2001, including identification of subjects to be dealt with as single issues/items for discussion or under multi-year work plans (based primarily on the results of UNISPACE III).
7. Report to the Committee on Peaceful Uses of Outer Space.

Items to be included in the draft provisional agenda of the Scientific and Technical Subcommittee at its thirty-eighth session, in 2001

1. General exchange of views and introduction to reports submitted on national activities.[e]

2. The United Nations Programme on Space Applications and the coordination of space activities within the United Nations system following the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III).

3. Matters relating to remote sensing of the Earth by satellites, including applications for developing countries and monitoring of the Earth's environment.

4. Agenda items considered under work plans:

   (a) Use of nuclear power sources in outer space:

   Second year of the work plan: review of national and international processes, proposals and standards and national working papers relevant to the launch and peaceful use of nuclear power sources in outer space;[f]

   (b) Subjects to be agreed upon in 2000 (first year of the work plans).

5. Single issues/items for discussion:

   (a) Space debris:[g]

   Subject for 2001 to be agreed upon;

   (b) Examination of the physical nature and technical attributes of the geostationary orbit and its utilization and applications, including in the field of space communications, as well as other questions relating to developments in space communications, taking particular account of the needs and interests of developing countries;

   (c) Other issues to be agreed upon in 2000.

6. Draft provisional agenda of the Scientific and Technical Subcommittee at its thirty-ninth session, in 2002, including identification of subjects to be dealt with as single issues/items for discussion or under multi-year work plans.

7. Report of the Committee on the Peaceful Uses of Outer Space.

B. Agenda of the Legal Subcommittee

2. Following the discussions on revising the agenda of the Scientific and Technical Subcommittee, with the presentation of a working paper on the subject (A/AC.105/C.1/L.227), the decision that follows on a revised agenda is intended to revitalize discussion in the Legal Subcommittee by providing the opportunity for expanded substantive discussions of legal issues affecting the conduct of space activities. Those discussions would be for the purpose of exploring the nature and scope of such issues, without any implication that the outcome of the discussion would necessarily lead to the development of legal principles or standards. Consistent with that approach, the revised agenda also affirms and revitalizes the role of the Committee on the Peaceful Uses of Outer Space in directing the work of its Legal Subcommittee, by providing a clear mechanism for the Committee to instruct the Legal Subcommittee and by creating a structured agenda.

3. The Committee on the Peaceful Uses of Outer Space decides as follows:

(a) The agenda of the Legal Subcommittee shall have the following structure:

(i) *Regular items*, including "General exchange of views", "Status of the outer space treaties" (to provide an opportunity for reports on any additional signature or ratification as well as application of the treaties), "Information on space law-related activities of international organizations" and the item related to the definition and delimitation of outer space and to the character and utilization of the geostationary orbit;

(ii) *Single issues/items for discussion*, which are decided upon the preceding year and which are discussed only for one year in the plenary unless renewed;

(iii) *Agenda items considered under a multi-year work plan and discussed in working groups*. The items under such work plans should have been discussed as single issues before;

(iv) *Future issues to be dealt with in the Legal Subcommittee*. Under this item issues can be proposed for consideration either as single issues/items for discussion or as items considered under a work plan: the main Committee will then decide on the inclusion of such new items in the agenda of the Legal Subcommittee;

(b) The agenda of the Legal Subcommittee for the year 2000 should therefore be composed as follows:

(i) *Regular items*

1. General exchange of views.
2. Status of the outer space treaties.
3. Information on space law-related activities of international organizations.
4. Matters relating to the definition and delimitation of outer space and to the character and utilization of the geostationary orbit, including consideration of ways and means to ensure the rational and equitable use of the geostationary orbit without prejudice to the role of the International Telecommunication Union.[h]

(ii) *Single issues/items for discussion*

5. Question of review and possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space.

(iii) *Agenda items considered under work plans*

6. Review of the status of the five international legal instruments governing outer space (third year of the work plan).
7. Review of the concept of the "launching State":

   First year of the work plan: special presentations on new launch systems and ventures.

(iv) *New items*

8. Proposals by the Legal Subcommittee to the Committee on the Peaceful Uses of Outer Space for new items as single issues/items for discussion or to be considered under work plans.

Notes

[a] In paragraph 14 (j) the General Assembly stated that the Committee on Space Research and the International Astronautical Federation should be invited to arrange a symposium on the theme fixed for special attention, to be held during the first week of the thirty-seventh session of the Subcommittee. The Committee on the Peaceful Uses of Outer Space noted with satisfaction that the theme fixed for special attention at that session would be "Space commercialization: an era of new opportunities" (see para. 82 of the present report).

[b] This agenda item combines a number of previous agenda items, for instance those on the status of science and technology in the fields of remote sensing, launch technology and planetary exploration, which had in recent years been used only for information exchange.

[c] A/AC.105/697, annex III, appendix.

[d] Keeping the Committee up to date on the development in the area, including through national reports and reports of relevant international organizations.

[e] This agenda item combines a number of previous agenda items, for instance those on the status of science and technology in the fields of remote sensing, launch technology and planetary exploration, which had in recent years been used only for information exchange.

[f] A/AC.105/697, annex III, appendix.

[g] Keeping the Committee up to date on the development in the area, including through national reports and reports of relevant international organizations.

[h] This agenda item will also be dealt with in a working group.

Annex II

Proposed actions to follow the technical study on space debris by the Scientific and Technical Subcommittee

Working paper submitted under agenda item 6 by France*

I. Introduction

1. The question of space debris has been on the agenda of the Scientific and Technical Subcommittee since February 1994, when the Subcommittee concluded that a sound scientific and technical basis was a prerequisite for further study. The following work plan was accordingly adopted in 1995:

1996 Measure space debris, interpret the data obtained and understand the effects of the space debris environment on space systems.

1997 Develop models of the space debris environment and undertake risk assessment.

1998 Formulate measures for mitigating the dangers posed by space debris.

2. The Subcommittee has acknowledged that Member States should be devoting greater attention to the issue of space debris and has urged Member States and international organizations to provide it with information about practical measures that have proved effective in reducing the amount of debris generated.

3. During the period of the work plan, considerable work has been done, in close liaison with many countries and with the Inter-Agency Space Debris Coordination Committee. In February 1999, the Subcommittee adopted the full report, which accurately reflects the current position on this question.

II. Proposal

4. To pursue this matter further the following actions are proposed:

(a) Distribution of the report adopted by the Scientific and Technical Subcommittee as widely as possible;

(b) A request to the Committee on the Peaceful Uses of Outer Space to instruct the Legal Subcommittee:

(i) To review the applicability of the space treaties to space debris issues in the light of the report adopted by the Scientific and Technical Subcommittee in 1999 and to assess whether the Subcommittee should consider additional matters with regard to its work;

(ii) To report on those matters to the Committee at its forty-third session, in 2001;

(c) A request to the Committee to decide what further activity may be necessary and to instruct the Scientific and Technical Subcommittee as required.

* On behalf of Austria, Canada, the Czech Republic, Germany, Greece, Hungary, India, Italy, Poland, Portugal, Sweden and the United Kingdom of Great Britain and Northern Ireland.

5. These proposals have sufficient flexibility to be adapted in the light of evolving knowledge concerning space debris. Such proposals endorsed by the Committee on the Peaceful uses of Outer Space will help to demonstrate to all Member States when they come together for the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space, the importance that the Committee attaches to this subject.

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